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HOMEMAKERS' CHAT

TUESDAY, January 31, 1939

(FOR BROADCAST USE ONLY)

Subject: "OVEN QUESTIONS." Information from the Office of Experiment Stations, U.S.D.A. Publication offered: "Homemade Bread Cake & Pastry," Farmers' Bulletin no. 1775. Order from the U. S. Dept. of Agriculture, Washington, D.C.

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When the north wind blows and the thermometer registers way down low, then homemade hot breads and cakes and pies and puddings taste extra good. So naturally this is the season when housewives do the most baking. And this is also the season when they ask the most questions about ovens.

This week's mail has brought several letters from women who unfortunately have cantankerous ovens. One letter complains about an oven that is always too hot if it's heated at all. Another tells about an oven so poorly insulated that it just won't hold enough heat, no matter how high the flame is turned underneath.

"Is there anything to do short of buying a new stove," asks the lady with the overheated oven--"Is there anything to do with an oven that always registers somewhere above 300 degrees and scorches almost everything I try to bake in it?"

Merna Monroe of the Main Experiment Station has some home remedies to suggest for this unfortunate situation. One way to keep your oven cool, she says, is to put open pans of cold water in it while you're baking. During heating, water absorbs considerable heat--may reduce the temperature of the oven as much as 50 degrees. Miss Monroe suggest using one or more pans containing 3 or 4 quarts of cold water. Place them in the hottest part of the oven. The faster the water evaporates, the more it cools the oven. If the uncovered pan cools the oven too much, try covering it, or using a narrower pan that does not expose so much surface of the water for evaporation. This method of water-cooling an oven works pretty successfully when you are baking something that doesn't take over 30 minutes.

For longer baking, keep down the heat with an asbestos board placed below the bottom rack. This board should be 2 or 3 inches shorter and narrower than the baking rack to give room for some of the hot air to rise around it. Be sure to set your pans of food toward the center of the oven. If they extend beyond the asbestos board, the blast of rising hot air along the side wall may scorch them.

Of course, you know that if you bake several foods at once--if you use your oven to maximum capacity, that helps cut down the temperature Food absorbs heat. The more food put into the oven, the more heat must be supplied to hold the same temperature.

That reminds me of the second question coming up--the one about the oven that won't get hot enough. If you have an oven that won't heat up satisfactorily, it's a good idea not to put too much food in to cook at one time. If your oven won't hold a high enough temperature to bake 6 loaves of bread, try baking fewer loaves at a time.

The trouble often is that an oven is not properly insulated, too much heat escapes through the top and the side walls. In this case you can help by putting in some homemade insulation. I have seen housekeepers try to insulate an oven by laying newspapers or catalogs or planks of wood on top of the oven. This is a dangerous practice because the heat from the oven may set the paper or wood on fire. Also it is not so effective an insulation as using asbestos board or paper inside the oven. Use several layers of asbestos material on the top, sides and back of the inside of the oven. (Asbestos, you know, is fireproof.) Be sure, however, that you don't put the asbestos over the holes or space in the oven that is built for circulation of air.

So much for the oven that is too hot and the one that is not hot enough. Now to answer the questioner who says that her oven is hot enough at the bottom but not at the top. What to do?

Answer: Maybe the trouble is that the baking rack is too close to the bottom wall. Try putting it higher up. Maybe you are using too many pans in the oven to allow for a good circulation of hot air. Try using fewer pans. Or maybe your baking pan is too large. Try using a smaller pan. Sometimes a small asbestos board at the bottom of the oven cuts off heat somewhat at the bottom and sends more to the top of the oven. And sometimes an asbestos board at the top keeps heat from escaping at the top. Whichever of these methods you use, the best remedy will be the one that encourages the hot air to rise to the top of the oven.

Another oven question: "Why do my cakes so often scorch on one side while the other side seems to bake perfectly?"

Answer: Perhaps because you set your pan too near the wall of your oven. The best place for a cake to bake is the place in the oven where the heat is even on all sides usually the center of the oven.

A housewife who is planning to buy an electric stove asks: "What size oven is most convenient?"

Answer: You haven't much choice in the size of an oven. Most electric ovens are 14 or 15 inches high with at least 3 to 5 inches of that height taken up by the heating units and baffle. The ovens are 17 or 19 inches deep and 14 or 16 or 18 inches wide. You may find that many of your oven casseroles and pans are too high to fit in an electric oven if you use both racks during one baking. To use the oven most efficiently, you'll need shallow baking dishes. As between a large or a small oven, remember that a large oven costs more to preheat and operate. But if your family is large and you do considerable baking, it's probably your best choice. A large family needs an oven that will accommodate the pans most frequently used at one time. Baking on the installment plan is a waste of heat and time. If you are in doubt about the size oven that will best suit your needs, keep a record of the pans you use most frequently together.

